

## Claims

1. A radiator unit of a motorcycle, in which a water-cooling type engine is mounted to a lower portion of a motorcycle body between a handle bar for laterally steering a front wheel and a rider's seat, said engine having a cylinder assembly having a substantially horizontal axis and a front portion inclining obliquely upward in a forward direction, a radiator unit is arranged in front of the engine, and a transmission unit is disposed at a rear portion of the engine and below the rider's seat, wherein said radiator unit is disposed so as to cover the front wheel and a cylinder head of the cylinder assembly from a front side thereof and is connected to the engine through a hose, the radiator unit has a vertically rectangular shape in an elevational section and is mounted to the motorcycle body through a rotational shaft extending vertically on lateral one side of the radiator unit in a traveling direction of the motorcycle, so that another one side one thereof is swung forward around the rotational shaft.

2. A radiator unit of a motorcycle according to claim 1, wherein said radiator unit includes a radiator core portion and a pair of cooling water tanks disposed at vertical upper and lower portions of the radiator core portion, hoses extending towards the engine are connected to the cooling water tanks on the side of the radiator unit at which the rotational shaft is

disposed.

3. A radiator unit of a motorcycle according to claim 1, wherein a portion between the handle bar and the front portion of the rider's seat is largely bent downward in almost U-shape so as to provide a foot moving space extending in the width direction of the motorcycle body, and low floor type foot-steps on which the rider's feet are rested are formed to lateral bottom portions of the U-shaped space, a floor tunnel is formed at a lateral central portion of the rider's foot-steps so as to extend in the longitudinal direction of the motorcycle body and protrude upward, and the engine and the radiator unit are disposed inside the floor tunnel.

4. A radiator unit of a motorcycle according to claim 1, wherein the radiator unit has a lower portion extending below the cylinder assembly and a cooling fan is disposed in a space surrounded by a rear surface of the extending portion and a front lower surface of the cylinder assembly so that a lower portion of the space is opened downward.

5. A radiator unit of a motorcycle, in which a water-cooling type engine is mounted to a lower portion of a motorcycle body between a handle bar for laterally steering a front wheel of the motorcycle and a rider's seat, said engine having a cylinder assembly having a substantially horizontal

axis and a front portion inclining obliquely upward in a forward direction, a radiator unit is arranged in front of the engine, and a transmission unit is disposed at a rear portion of the engine and below the rider's seat,

said radiator unit comprising:

a radiator core portion having a vertically rectangular shape in an elevational section;

a pair of cooling water tanks arranged on vertically upper and lower portions of the radiator core portion; and

a cooling water feed hose and a cooling water return hose, both being connected to the cooling water tanks, respectively,

wherein said radiator unit is disposed so as to cover the front wheel and a cylinder head of the cylinder assembly from a front side thereof and is mounted to the motorcycle body through a rotational shaft extending vertically on lateral one side of the radiator unit in a traveling direction of the motorcycle, so that another one side one thereof is swung forward around the rotational shaft.